



TOWARD A MORE
COMPETITIVE
COLORADO
2022

A MESSAGE FROM THE PRESIDENT

Dear Metro Denver,

The Metro Denver Economic Development Corporation (Metro Denver EDC) is proud to present the 2022 *Toward a More Competitive Colorado (TMCC)* report.* This year, in addition to the annual study, we hosted our first annual TMCC event, where we unveiled the key findings of the report, reviewed Colorado's competitive position, and provided expanded insight as to how the data and trend lines can be used by policy makers, businesses, and other community leaders to help shape the future of Colorado.

This edition of TMCC evaluates Colorado's competitive position both nationally and with select competitor states using 36 key indicators. This document highlights the trends in the key indicators for Colorado and ten major competitor states, detailing the state's strengths and some of its challenges. It should be noted that this report measures Colorado's competitive position in the aftermath of the COVID-19 pandemic, marking changes from a decade-long period of expansion through the COVID-19 recession ending in April 2020, and into the beginning of the recovery period that followed. Colorado is still in a strong and economically competitive position, factors that will contribute to the state's continued recovery. The state achieved a top-10 ranking for 16 of the 36 indicators, and declines were generally only by a rank or two.

Key points from this year's report:

- College-educated workers find abundant opportunities to remain in or relocate to Colorado. With 44.4 percent of the adult population having a bachelor's degree or higher, Colorado ranked as the second most highly educated state in the nation, tying Vermont. Colorado previously held the No. 2 ranking for nine consecutive years. Colorado remained the highest ranked competitor state and the only state besides Virginia (No. 6) in the top 10.
- Colorado ranked seventh for well-being, according to the Sharecare Community Well-Being Index, with residents posting high levels of physical well-being, social well-being, and economic access. Of Colorado's competitor states, only California ranked ahead of Colorado at No. 6. Washington also ranked in the top 10, coming in at No. 9.
- Colorado's rank for employment growth among the states was unchanged at No. 17 in 2021. All but two competitor states dropped in ranking. Utah was the fastest growing competitor and ranked No. 3 among all states, posting a 5.2 percent growth rate. Florida followed closely behind and was ranked No. 5 among the states with a 4.9 percent growth rate.

* This Report uses the most recently available data, compiled in 2022 and published in 2023.

- Colorado’s entrepreneurial environment fosters job creation and a high-level of new business formation. In 2021, Colorado ranked 13th among the states with 12.11 new business establishments per 1,000 workers. This figure is the highest on record in Colorado since the series began in 2000, surpassing the previous high in 2020 of 9.88 new business establishments per 1,000 workers.
- Colorado’s annual average unemployment rate was 5.4 percent in 2021, earning the state a No. 33 ranking, down from 24 in 2020. At the same time, Colorado continued to have one of the highest labor force participation rates in the country with the 4th highest. The only other competitor state in the top 10 was Utah (No. 5).

The Metro Denver EDC relies heavily on data to guide our work, and TMCC serves to advise us to where our policy efforts should lie. Everything we do at the Denver Metro Chamber of Commerce and Metro Denver EDC is about one thing: economic empowerment for every Coloradan. We hear more and more from executives and site selectors with concerns regarding where Colorado is headed when it comes to policy. They worry that the cost and regulatory burden of doing business in our state is negatively impacting our economic competitiveness. We know that it is crucial to prioritize our economy and our people as we continue to work through our challenges and better our strengths. We encourage our partners to use TMCC as a resource for your business and community to collectively focus our efforts on impactful investments in education, workforce development, and business infrastructure while striving to maintain our positive business environment.

Before bills are introduced or votes are cast, legislators must ask themselves this: is this legislation making it easier or harder for my neighbor to get or keep a job? Is this legislation helping or hindering business creation and innovation? We continue to focus on the critical issues that will determine the health of our community and economy for generations to come, using this report to offer prospective companies, policymakers, and our partners a deeper understanding of our regional and state economy.

Sincerely,



Raymond H. Gonzales
President of Metro Denver EDC
Executive Vice President of Denver Metro Chamber of Commerce



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ABOUT TMCC

Research and data are at the center of everything we do. The Metro Denver EDC has produced TMCC annually since 2005. TMCC is a longitudinal study of Colorado's competitive position as tracked by over 100 indicators grouped into eight major categories. The data stretches back to 2000, providing a look at how Colorado's business environment fared during some of the best and worst years in the state's economic history. TMCC provides data and trend lines for

policy makers, businesses, and other community leaders to consider as they deliberate future policies and programs.

This edition of TMCC examines a group of 36 key indicators to evaluate Colorado's competitive position both nationally and with select competitor states. This document highlights the trends in the key indicators for Colorado and ten major competitor states¹ for the interval years of 2011, 2016, and

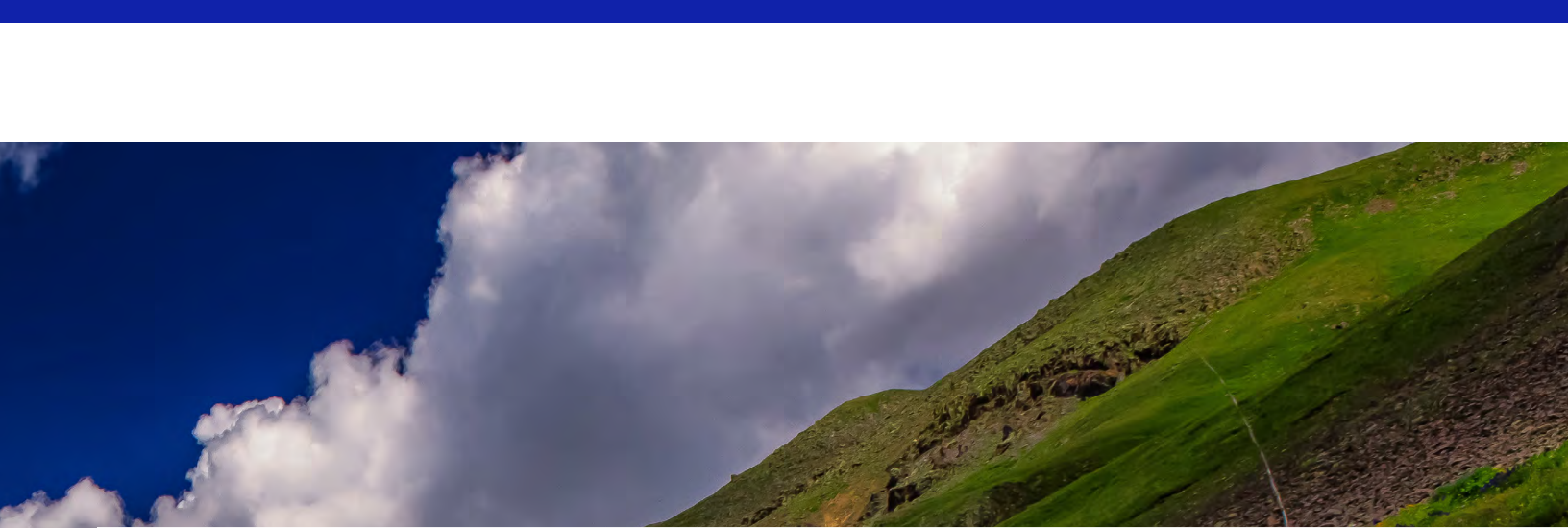
2021 (or the most current year available), detailing the state's strengths and some of its challenges. It should be noted that this report measures Colorado's competitive position in the aftermath of the COVID-19 pandemic. This report marks changes from a decade-long period of expansion through the two-month long COVID-19 recession ending in April 2020, and into the beginning of the recovery period that followed.

REPORT OVERVIEW

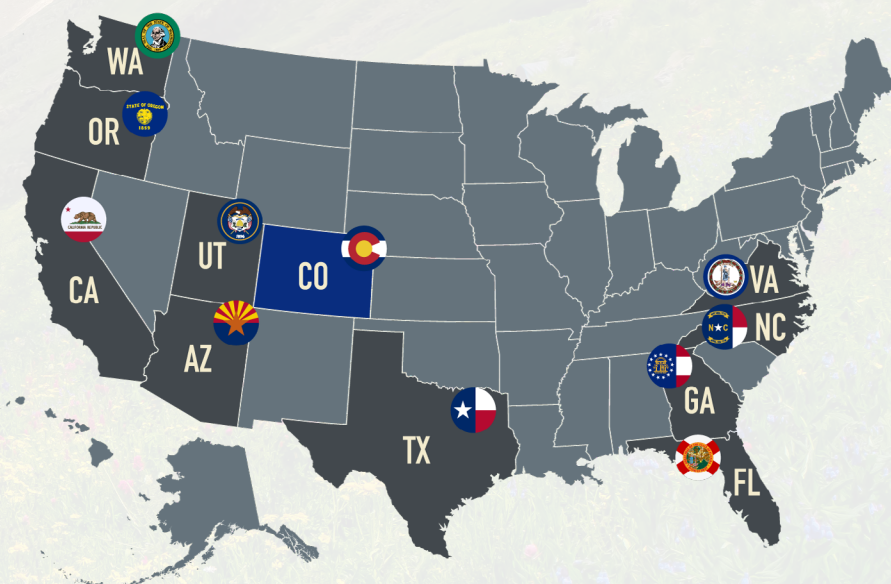
The indicators show that Colorado is still in a strong and economically competitive position, factors that will contribute to the state's continued recovery. Colorado achieved a top-10 ranking for 16 of the 36 indicators, up from 15 top-10 rankings last year. However, Colorado's rank relative to the other states declined in 14 of the 36 indicators this year compared to the prior year. While the declines were generally

only by a rank or two, there were two notably steeper declines. First, Colorado's unemployment rate rank declined from No. 24 in 2020 to No. 33 in 2021 as the state's economy continued to recover from COVID-related closures and the associated job losses, which were especially hard on service-oriented businesses, of which Colorado has a strong concentration due to the importance of tourism to the state. Second, Colorado's

population growth rate slipped from No. 11 to No. 17. While population growth slowed across the country, Colorado's relatively higher unemployment rate kept in-migration lower and the natural increase in the population (births less deaths) declined.



COMPETITOR STATES



 ¹Colorado's major competitor states: based in similar economic demographic profiles.



ARIZONA



CALIFORNIA



FLORIDA



GEORGIA



NORTH CAROLINA



OREGON



TEXAS



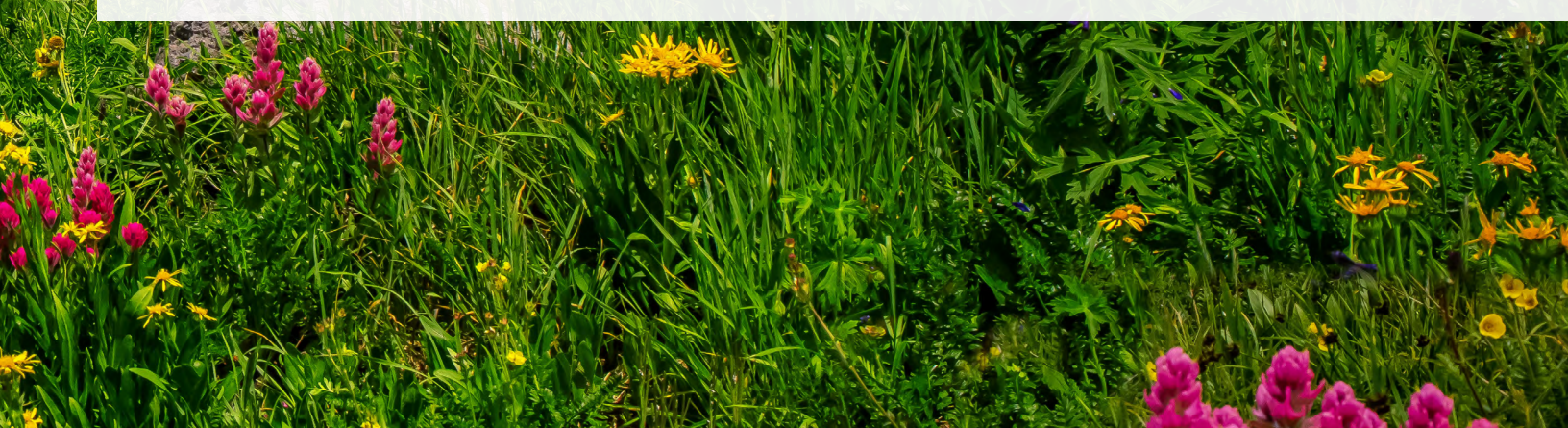
UTAH



VIRGINIA



WASHINGTON



ECONOMIC VITALITY

Every state reported an increase in employment from 2020 to 2021 and national employment rose by 3.4 percent, returning to growth after a one-year decline due to COVID-19. Business closures associated with the pandemic were a major factor in the employment decline. Colorado employment rose by 3.7 percent, or by almost 98,000 jobs. Colorado's rank for employment growth among the states was unchanged at No. 17 in 2021. All but two competitor states dropped in ranking. Utah was the fastest growing competitor and ranked No. 3 among all states, posting a 5.2 percent growth rate. Florida followed closely behind and was ranked No. 5 among the states with a 4.9 percent growth rate.

Colorado's annual average unemployment rate was 5.4 percent in 2021, earning the state a No. 33 ranking, down from 24 in 2020. At the same time, Colorado continued to have one of the highest labor force participation rates in the country with the 4th highest. The only other competitor state in the top 10 was Utah (No. 5).

Job availability in Colorado was high in 2021 with 1.7 job openings for every unemployed worker, ranking 27th in 2021. Two competitor states ranked in the top 10: Utah (No. 1) and Georgia (No. 4). California had 1.1 job openings-per-worker, which was ranked No. 50, while the highest ranked states: Indiana, Nebraska, and Utah all had 3.3 job openings.

Colorado attracts a well-educated and productive workforce, ranking No. 9 in 2021 for high per capita personal income and No. 14 for state Gross Domestic Product per employee. Among the competitor states, only California (No. 4) and Washington (No. 7) have higher per capita personal income.

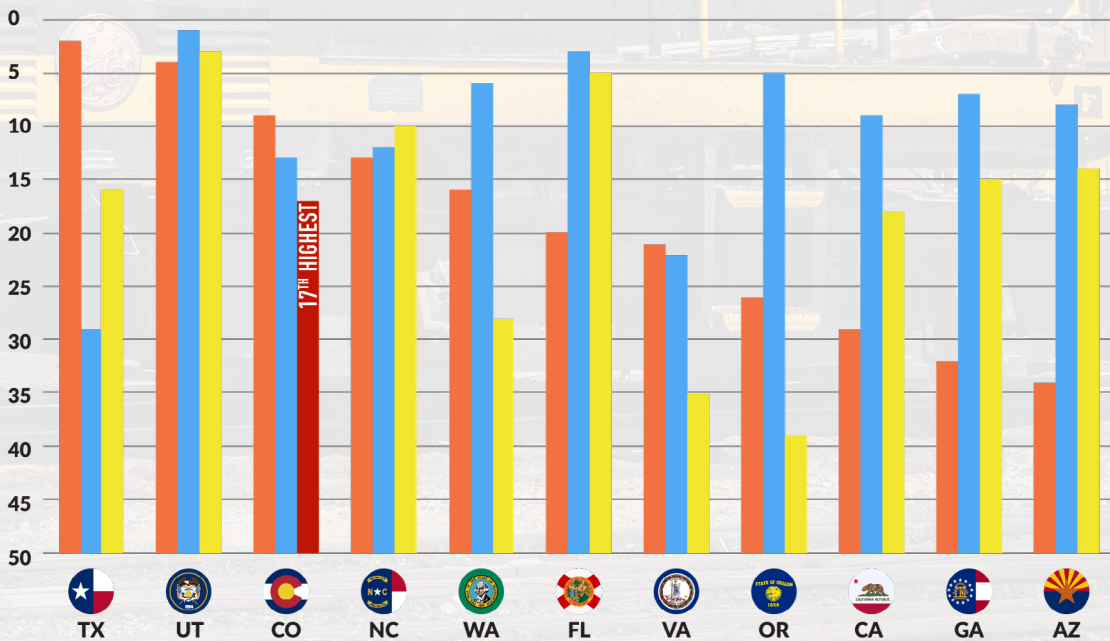




ANNUAL EMPLOYMENT GROWTH RATE

U.S. Bureau of Labor Statistics

2011 2016 2021



INNOVATION

Colorado's entrepreneurial environment fosters job creation and a high-level of new business formation. In 2021, Colorado ranked 13th among the states with 12.11 new business establishments per 1,000 workers. This figure is the highest on record in Colorado since the series began in 2000, surpassing the previous high in 2020 of 9.88 new business establishments per 1,000 workers; however, large increases in new business establishments in Maine, New Jersey, and Vermont pushed Colorado down to 13th from 11th a year ago, keeping the state out of the top-10 ranking for the second consecutive year. Among competitor states, only Florida (No. 3), California (No. 11), and Utah (No. 12) outrank Colorado.

According to the Kauffman Indicators of Entrepreneurship index, Colorado ranked 8th in early-stage entrepreneurship in

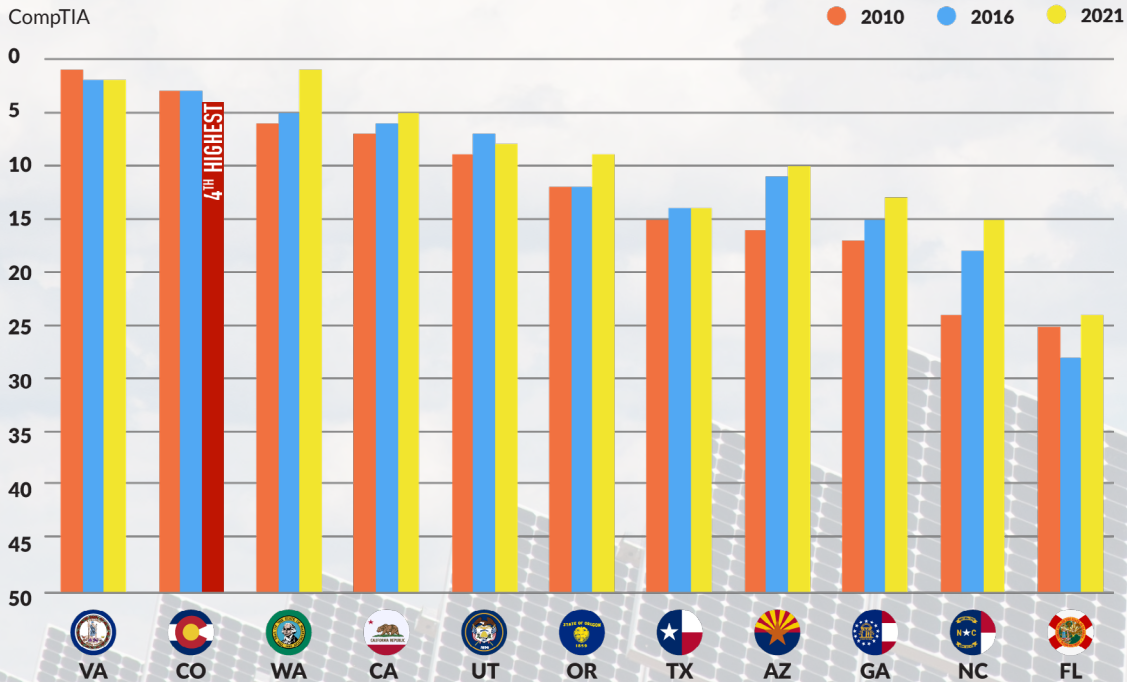
2021, jumping up 14 spots from No. 22 in 2020. Colorado's position reflects its rankings for new entrepreneurs, startup job creation, and startup survival rates.

A significant share of Colorado's employment base is proprietors' employment. In 2021, proprietors comprised 27 percent of the state's total employment, the sixth-highest share in the nation. Among competitor states, only Florida (No. 2), Texas (No. 4), and Georgia (No. 5) outrank Colorado, which has been in the top 10 for the last 22 years.

Colorado is a top location for public sources of research grants and contract awards. In 2021, Colorado had the fourth-highest concentration of Small Business Innovation Research (SBIR) grants, up from sixth in 2021, and the sixth-highest amount of NASA prime contract awards. In 2021,

HIGH-TECH EMPLOYMENT CONCENTRATION PER 1,000 WORKERS

CompTIA



Colorado companies and institutions were awarded almost \$1.13 billion in NASA prime contract awards comprising 7.6 percent of dollars awarded nationally.

Colorado (No. 4) has the highest concentration of SBIR grants per worker compared with the competitor states, just edging out Virginia (No. 5). Additionally, only California (No. 1), Texas (No. 4), and Florida (No. 5) ranked higher than Colorado for NASA prime contract awards, a result of the state's strong Aerospace industry cluster.

Innovation in Colorado is demonstrated by the level of R&D expenditures at the state's academic institutions. In 2020, Colorado's science and engineering R&D per capita ranked 14th-highest. Colorado was the highest-ranked competitor except North Carolina (No. 9) and Utah (No. 13).

In 2019, Colorado ranked 16th in R&D expenditures as a percentage of state GDP, rising 10 spots from the 2018 ranking.

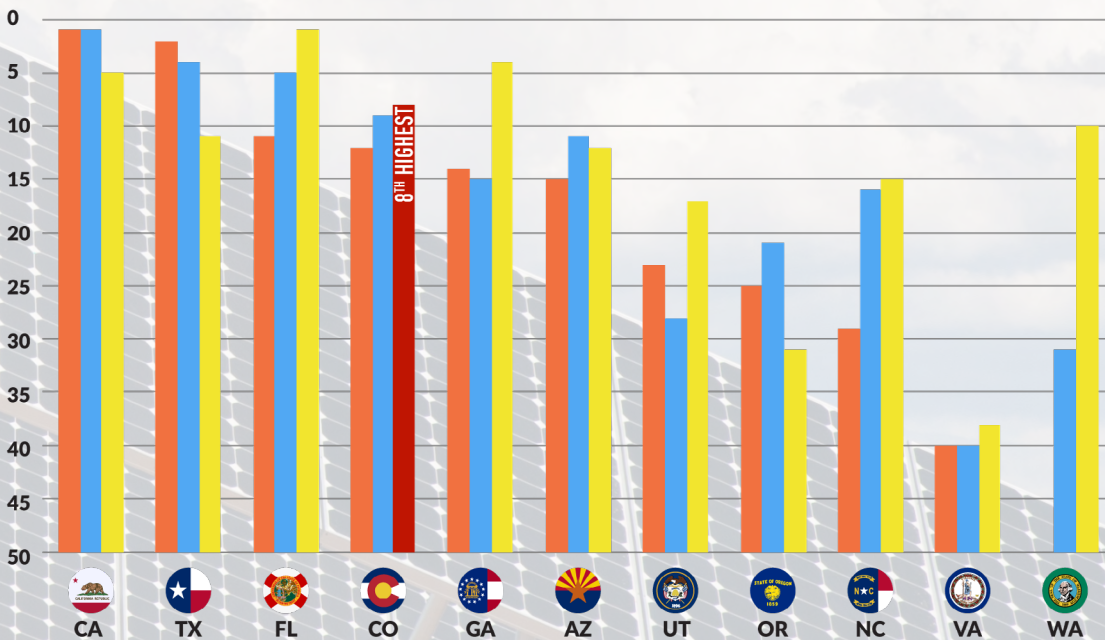
Colorado's innovators at the state's universities, businesses, and institutions earned the state a No. 10 ranking in 2020 for patents granted per capita. California, Washington, and Oregon were the only other competitor states in the top 10.

Cutting-edge technology characterizes Colorado's economic base, with one of the nation's highest concentrations of high-tech employees. In 2021, Colorado ranked No. 4 for high-tech employment concentration and has ranked in the top four since 2000. Washington (No. 1), Virginia (tied for No. 4), and California (No. 5) were the other competitors in the top five.

ENTREPRENEURSHIP INDEX

Kauffman Indicators of Entrepreneurship

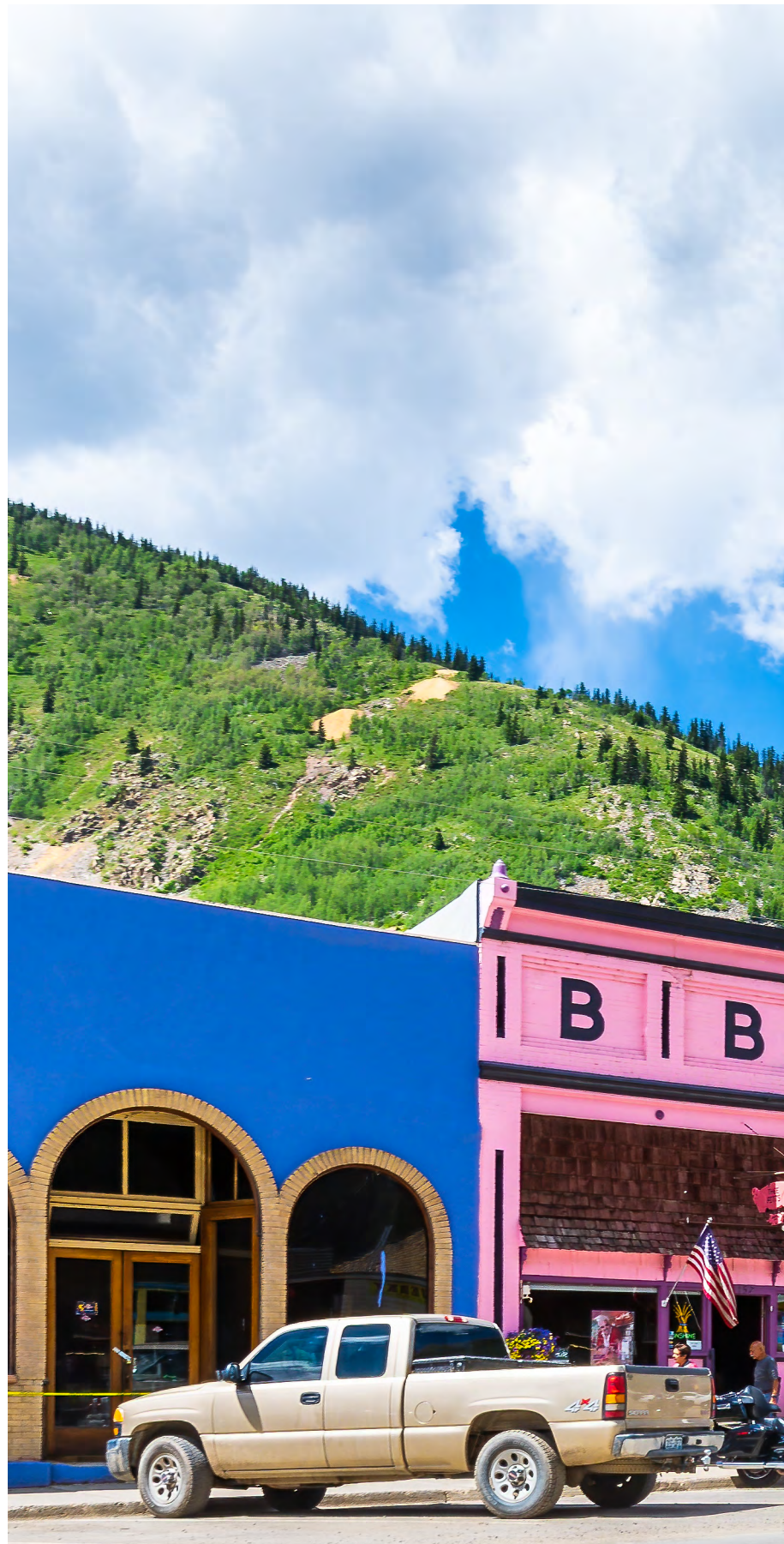
● 2011 ● 2016 ● 2021



TAXES

Colorado has the 21st best state business tax climate according to the Tax Foundation. Colorado ranked among the top 25 states due to its favorable corporate tax, individual income tax, and property tax ranks. Colorado ranked in the middle of the competitor states, as Florida, Utah, North Carolina, Texas, and Washington ranked better than Colorado. The Tax Foundation noted no significant changes in tax structure among Colorado's competitors from 2021 to 2022.

The Tax Foundation ranked Colorado No. 7 in its corporate tax index. Colorado ranked favorably with its single-rate system and the fourth-lowest corporate income tax rate in the country of 4.55 percent. Colorado's corporate income tax rate will be declining to 4.4 percent effective in tax year 2022 due to a recent ballot measure approved by Colorado's voters. Four of Colorado's competitors ranked among the bottom 25 states including California, Oregon, Texas, and Washington.





Colorado ranked seventh for well-being, according to the Sharecare Community Well-Being Index, with residents posting high levels of physical well-being, social well-being, and economic access. Of Colorado's competitor states, only California ranked ahead of Colorado at No. 6. Washington also ranked in the top 10, coming in at No. 9.

Three of Colorado's competitors rank among the bottom half of states for well-being including Texas (No. 27), Georgia (No. 35), and North Carolina (No. 38).

Colorado ranked in the top 10 for its population growth rate from 2006 to 2018, but the state's 0.5 percent growth rate from 2020 to 2021 only earned it a No. 17 position, keeping the state out of the top 10 for the third consecutive year. Indeed, this was the slowest growth rate in the state since 1989. Colorado's population growth remained higher than the national rate of 0.1 percent, growing faster than the national average for the 18th consecutive year.

Colorado's competitors were amongst the fastest growing states in 2021, with Arizona, Florida, Utah, and Texas among the top 10. Colorado did score in the top 10 in net migration in 2019, the most recent year that data is available. Similar to population growth, Colorado's competitors also ranked highly in net migration with Florida (No. 1), Texas (No. 2), Arizona (No. 4), North Carolina (No. 5), Washington (No. 8), and Georgia (No. 9) all ranking in the top 10.

Based on the median home price in the largest metropolitan area in each state, Colorado ranked 43rd in terms of lowest home prices. The median home price in the Denver-Aurora-Lakewood MSA registered the fourth-highest price increase in 2021, jumping by 23.2 percent over-the-year to \$607,100. Of Colorado's competitors, only California (ranked 46th out of 47) and Washington (No. 45) had higher home prices.

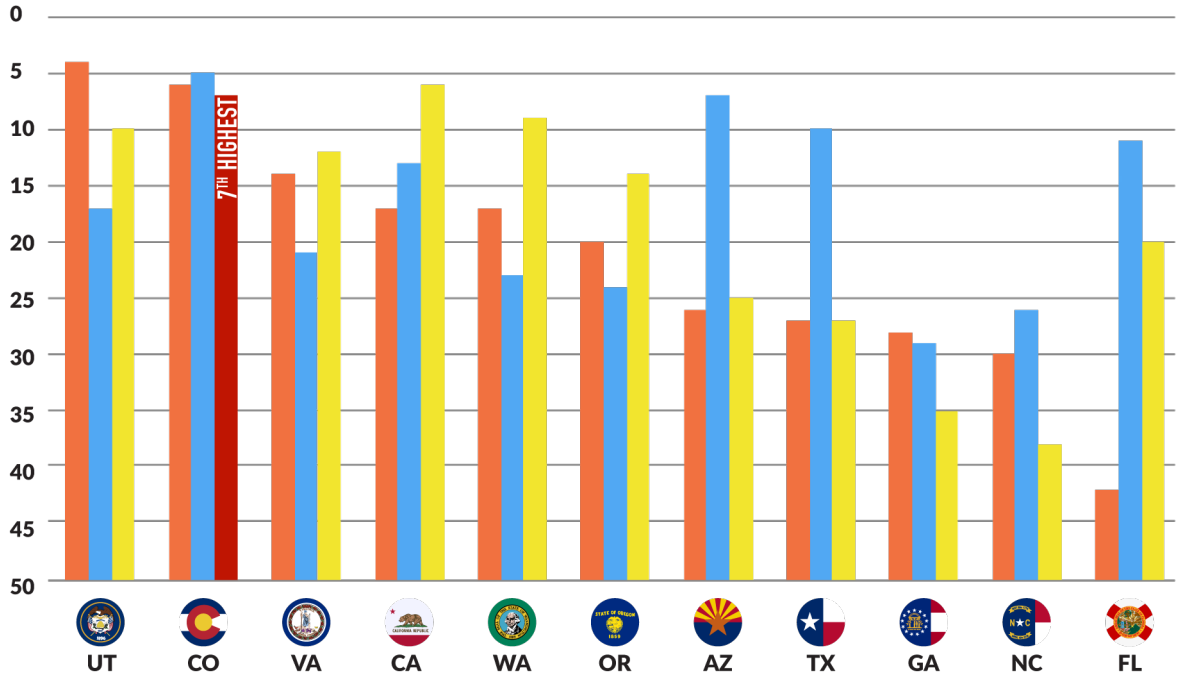




HIGHEST WELL-BEING

Sharecare Community Well-Being Index

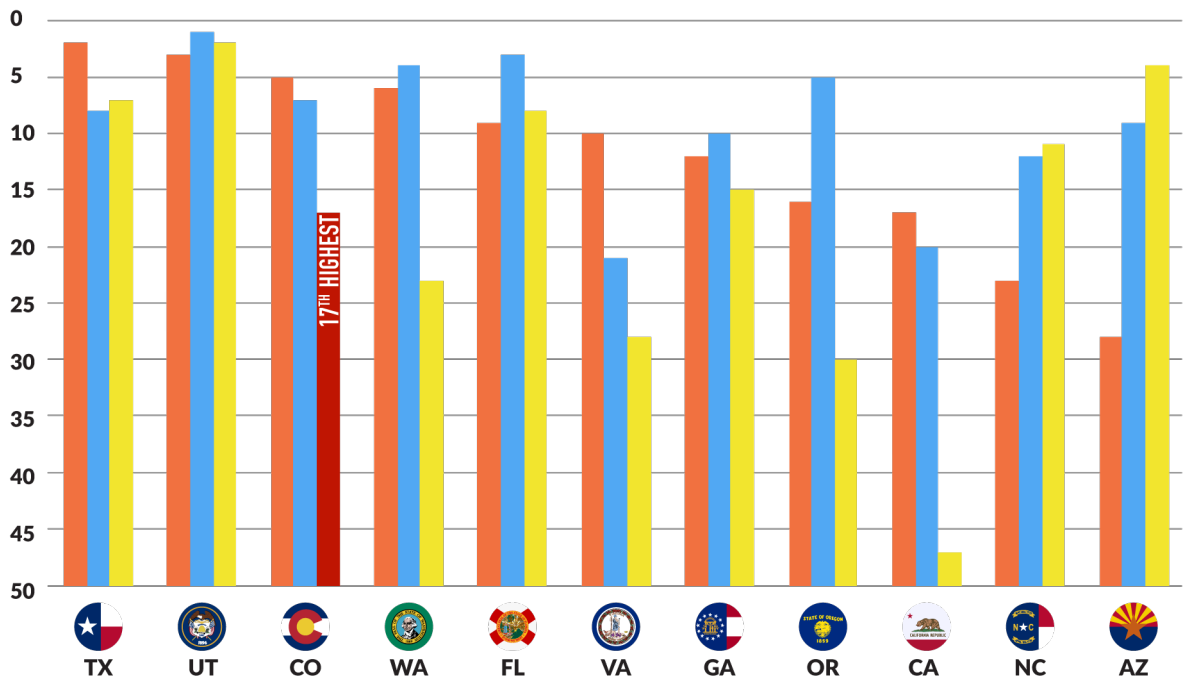
● 2011 ● 2016 ● 2021



ANNUAL POPULATION GROWTH RATE

U.S. Census Bureau

● 2011 ● 2016 ● 2021



K-12 EDUCATION

In 2019, Colorado continued to struggle with its high school graduation rate, ranking 42nd in the nation with an 81.1 percent rate. Colorado's rank improved over the previous 5 years, up from 46th among the states in 2015. Colorado was one of the lowest ranked competitors, outscoring only Arizona (No. 49) and Oregon (No. 48). Colorado also finished 38th for high school graduates going to college, and No. 37 for the percentage of students going to college in their own state.

In 2021, Colorado ranked 26th in expenditures per student in K-12 public schools. Colorado's per student expenditures have ranked in the middle of the states since 2005, ranking between 32nd and 21st. Colorado also ranked in the middle of the competitor states, with rankings ranging from Washington at No. 10 to Utah at No. 49. Four of Colorado's competitors ranked in the top half of the states for the level of public K-12 expenditures per student: Washington (No. 10), California (No. 17), Oregon (No. 20), and Virginia (No. 21).

Colorado elementary school students continue to excel in reading proficiency scores, ranking 4th in average 4th grade reading scores. Florida (No. 3) and Utah (No. 7) were the only competitor states in the top 20.





HIGHER EDUCATION

College-educated workers find abundant opportunities to remain in or relocate to Colorado. With 44.4 percent of the adult population having a bachelor's degree or higher, Colorado ranked as the second most highly educated state in the nation, tying with Vermont. This marks the tenth consecutive year Colorado has ranked second. Colorado remained the highest ranked competitor state and the only state besides Virginia (No. 6) in the top 10.

While Colorado boasts a highly educated population, many of the state's most educated moved here from other parts of the country. Colorado ranked 46th in terms of the percentage of college educated residents who were born in their state of residence. Only 27.3 percent of college educated people in Colorado were born in the state. All competitor states ranked in the bottom 25 except for California (No. 10) and Texas (No. 22).



Colorado ranked in the top 25 (No. 20) for college enrollment per capita, with 48 college students per 1,000 residents enrolled in college across the state. Utah (No. 2), Arizona (No. 5), and Virginia (No. 9) all ranked in the top 10.

Businesses need ready access to individuals that excel in science, technology, engineering, and mathematics. One measure of the prevalence of STEM

education is the number of science, engineering, and health graduate students per 1,000 Individuals ages 25 to 34, a measure in which Colorado currently ranks No. 11. Colorado ranked ahead of nine competitor states, behind only Virginia (No. 3).



Colorado lost its status as the “thinnest” state in 2021, coming in at No. 2 after 18 consecutive years at No. 1. Colorado’s obesity rate of 25.1 percent was second only to Hawaii (25 percent). According to the most recent Behavioral Risk Factor Surveillance System data, adult obesity rates now exceed 35 percent in 19 states, up from 16 states in 2020.

Colorado consistently reports some of the highest levels of physical activity among adults in the nation. Colorado boasts favorable weather, vast open spaces, and communities amenable to an active lifestyle. In 2021, Colorado finished just after Vermont for the highest levels of reported physical activity in the nation. Colorado has ranked No. 1 or No. 2 for the past 10 years of comparable data.

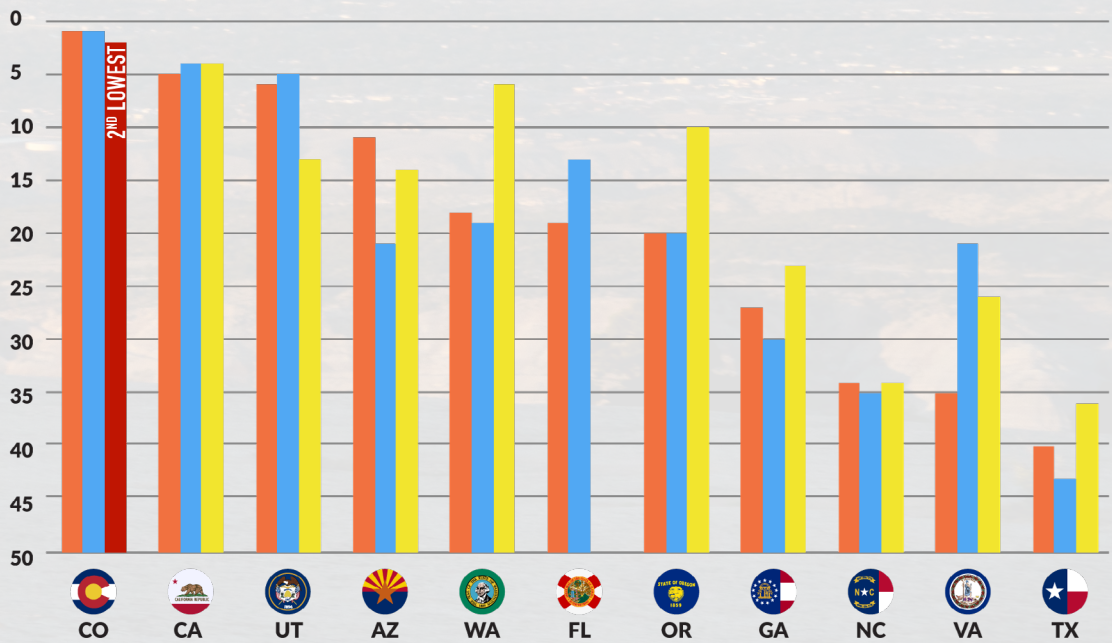




LOWEST OBESITY PREVALENCE AMONG ADULTS

Trust for America's Health, The State of Obesity

● 2011 ● 2016 ● 2021



INFRASTRUCTURE

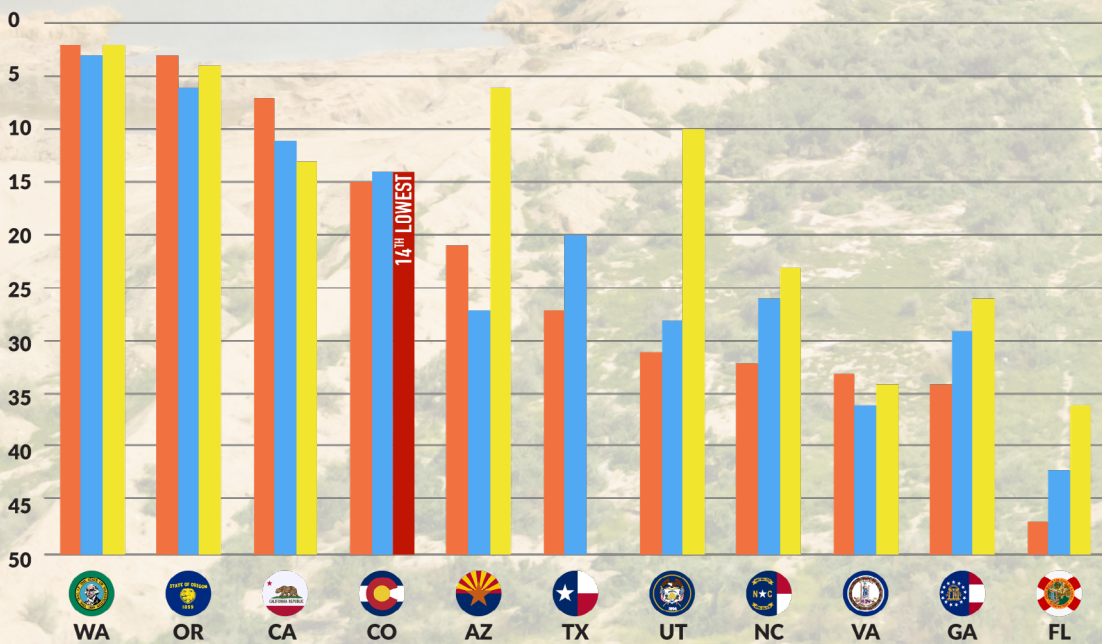
Transportation funding remains a challenge for Colorado. When examining data from the Federal Highway Administration on the total revenue per capita available for highway expenditures from federal, state, and local sources, Colorado's funding level increased from \$3 billion to \$3.4 billion in 2020, boosting the state's ranking to 24th, up from No. 35 in 2019. Colorado ranked in the middle of the competitor states on per capita transportation funding, which were led by Utah (No. 9) and trailed by Georgia (No. 47).

Colorado ranked among the top 20 states for the percentage of its electricity generated from renewable sources. Strong policies and investment from the state's utility providers means that renewables fill an increasingly important place in the state's energy portfolio. In 2021, Colorado generated nearly 33 percent of its electricity from renewable sources. Renewable energy investment supports thousands of jobs in Colorado, from manufacturing turbine components to installing wind and solar energy facilities.

PERCENT OF ELECTRICITY GENERATED THROUGH RENEWABLE SOURCES

Energy Information Administration

● 2011 ● 2016 ● 2021



Colorado ranked 14th among the states for its share of electricity generated by renewable sources. Of the competitor states, only Washington (No. 3), Oregon (No. 6), and California (No. 11) were ranked ahead of Colorado.

Solar energy generation is a rapidly growing segment of Colorado's energy mix, boosted by cost reductions, scale, and vast resource potential. Colorado's solar generation is almost seven times higher in 2021 than in 2015. The state

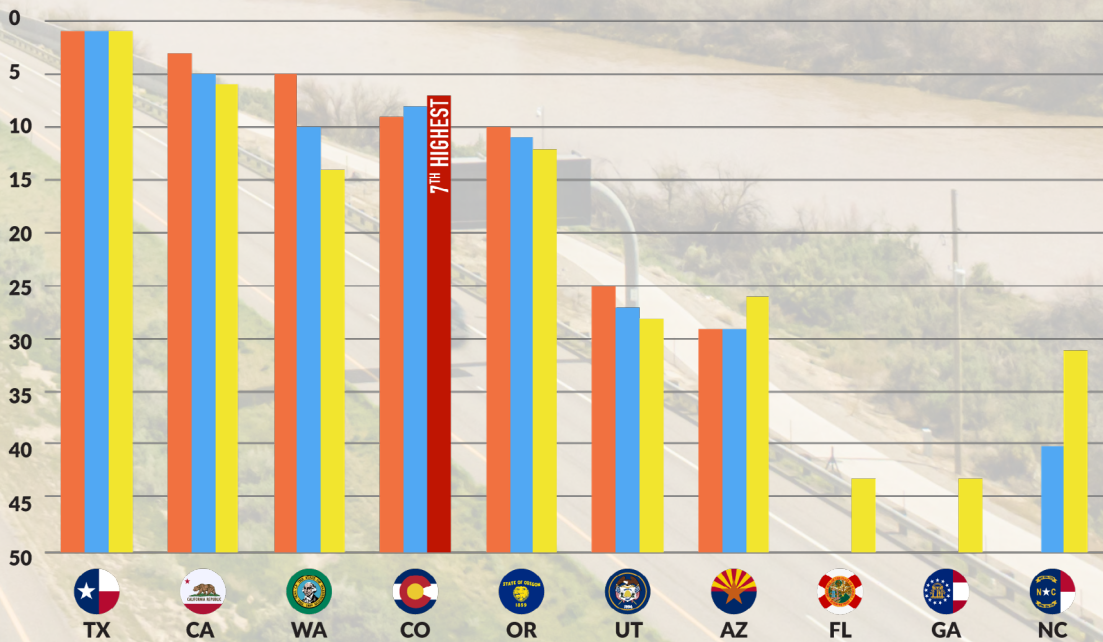
generated 1.7 million megawatt hours of electricity from solar in 2021, earning the state a No. 13 ranking. California led the nation, generating almost 34.9 million megawatt hours of electricity in 2021.

Wind energy production grew by 13 percent in Colorado between 2020 and 2021. Colorado remains in the top 10 in wind energy generation coming in 7th. Texas (No. 1), California (No. 6), and Washington (No. 10) also made the top 10.

TOTAL WIND ENERGY GENERATION

American Wind Energy Association

● 2011 ● 2016 ● 2021



LOOKING BACK ON 2022

In 2022, under the leadership of Metro Denver EDC President Raymond H. Gonzales, the new team worked tirelessly to maintain Colorado's competitive edge. The Metro Denver EDC leads global business attraction, retention, and expansion efforts for Colorado's Front Range – partnering with state, county and local economic development organizations to support the nine-county service region and the state's economic growth and vitality.

The team at the Metro Denver EDC managed an average of 60 qualified economic development projects across nine industry clusters and two lifestyle verticals at any given time. The project pipeline has been concentrated in the aerospace, energy, manufacturing, and bioscience industries, and companies continue to consider Colorado for the people, location, and incredible lifestyle. The team also took their international development efforts to new heights. They traveled to

Mexico, Germany, France, Israel, Scotland, Canada, Finland and London – showcasing what Colorado has to offer to companies and entrepreneurs. Not only were great connections made on these trips, but the team generated new prospects along with hosting six foreign delegations.

In June, the team launched TalentCO, a research and marketing effort triggered by the labor shortage facing state and local employers. Aimed at better understanding the gaps in the talent supply so that we can collectively take a more strategic approach to business development, workforce recruiting, retention, and talent pipeline planning. Additionally, the Metro Denver EDC launched two new lifestyle verticals focused on Arts & Culture and Outdoor Recreation. These two industries have a noticeable economic impact on the regional economy and play a role in Colorado's culture and character. With the support of the Front Range Economic

Collaborative, the Metro Denver EDC hosted a five-day Site Selection conference focused on promoting the region's benefits, including the "human capital" Metro Denver offers to companies considering Colorado for relocation or investment. The team was honored to showcase what makes our community among the best places to live and work in the county.

The Metro Denver EDC had several major wins in the business recruitment realm. The team was instrumental in securing deals that created almost 3,000 new jobs, and the companies currently in the business development pipeline represent over 15,000 jobs and \$6 billion of capital investment. The Metro Denver EDC is committed to keeping Colorado competitive through sustainable growth, focusing on our human capital, and preserving the Colorado way of life.

COMPANIES WE SUPPORTED IN 2022



ABOUT THE METRO DENVER EDC

Often called a “center of influence,” the Metro Denver EDC was the nation’s first regional economic development organization. From Castle Rock to Fort Collins and Golden to Greeley, we represent the nine counties and 66 communities that contribute to our resilient economy and incredible culture.

Thanks to the leadership and generosity of 250 of Colorado’s most influential companies, we work to monitor and respond to the Colorado economy through corporate attraction and retention; workforce development; domestic and global marketing; investments in infrastructure; and public policy that fosters a pro-business climate.

The data we produce is foundational to the work we do. Publications like our annual *Toward a More Competitive Colorado* report offer our clients, investors and community partners timely and relevant information on our regional and state economies.

If information like the data included in this report would be valuable on a more regular basis, we invite you to consider an investment in our organization. Metro Denver EDC investors leverage our data, intel and insights to strengthen their own companies and programs. They help lead the transformational projects that make Metro Denver a world-class region. They help determine our priorities – including our organizational strategy, policy engagement, and decisions around regional growth. And ultimately, they play a key role in making our community an even better place to live and work.

For more information on becoming part of the Metro Denver EDC or broader Denver Metro Chamber of Commerce, contact membership@denverchamber.org.



ABOUT DEVELOPMENT RESEARCH PARTNERS

Development Research Partners specializes in economic research and analysis for local and state government and private sector businesses. Founded in 1994, the DRP team combines extensive experience in real estate economics and economic development to provide clients with reliable consulting services in four areas of expertise:

- **Economic & Demographic Research** - Research in support of business and community activities, ranging from community profiles to evaluating and forecasting economic and market conditions.
- **Industry Studies** - Specialized research projects including industry cluster research, industry trends analysis and strategic competitive analysis.
- **Fiscal & Economic Impact Analysis** - Comprehensive custom analysis and analytical tools to evaluate and forecast site-specific activities and model business and government costs and benefits.
- **Real Estate & Public Finance Economics** - Analysis and strategy for infill redevelopment, adaptive reuses and property development, including market and feasibility studies, public investment analysis and public-private partnering opportunities.



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